

Additions to the Pteridophyte Flora of Kalimantan, Indonesian Borneo

E. BELLEFROID, P. CHAERLE, O. LEROUX, and R. L. L. VIANE¹

Ghent University, Dept. of Biology, Research Group Pteridology,
K.L. Ledeganckstraat 35, 9000 Ghent, Belgium

ABSTRACT.—A list of 59 newly recorded Pteridophytes from the Bukit Baka- Bukit Raya National Park in Central Kalimantan is presented. Nine species are recorded for Indonesian Borneo (Kalimantan) for the first time: *Diplazium polycarpum*, *Pronephrium peltatum* var. *persetiferum*, *Pteris asperula*, *Selliguea enervis*, *Sphaerostephanos latebrosus*, *Sphaerostephanos reconditus*, *Syngamma quinata*, *Tectaria tricuspis*, and *Trichomanes humile*. Previously, *Sphaerostephanos reconditus*, and *Tectaria palmata* var. *dimorpha* were only known from their type localities.

Borneo lies in the center of the Southeast Asian archipelago and is divided politically between the Republic of Indonesia (Kalimantan), the Malaysian Federation (Sarawak and Sabah), and Brunei Darussalam. Bukit Baka-Bukit Raya National Park (181.090 ha) includes the highest regions of the Schwaner Mountains (Bukit Baka: 1617 m, Bukit Raya: 2278 m), and forms the borderland between West and Central Kalimantan. In the past the area was densely covered with lowland forest, dipterocarp hill forest, submontane forest, and montane forest, but since the end of the 20th century the area is suffering severe illegal logging. The temperature is relatively constant throughout the year and ranges between 25°C and 35°C in the lowlands. In Borneo there are very few months with rainfall below 200 mm, and most regions of the mountainous inland receive between 2000 and 4000 mm per year (MacKinnon *et al.*, 1996).

Malesia is a major hotspot of global biodiversity and harbors one of the greatest numbers of species of ferns and fern allies in the world. Next to New Guinea, Borneo holds the greatest species richness of Pteridophytes in this floristic region (Kato, 1990). However, surprisingly few studies are conducted on the ferns of Kalimantan (ca. 70% of Borneo), and West and Central Kalimantan are practically forgotten by botanists and scientists in general. In these provinces, the only significant collections of Pteridophytes were made in Bukit Baka- Bukit Raya National Park: Tumbang Riang and Bukit Raya (Nooteboom, 1987, material deposited in Leiden), and Kalaweit Research Station and surroundings (this study).

During an expedition in the summer of 2001, the first author collected 117 fertile specimens of Pteridophytes in the area around Kalaweit Research Station. This field station is situated in the southern part of the National Park

¹Corresponding author.